Complete Summary

GUIDELINE TITLE

Acute sinusitis in adults.

BIBLIOGRAPHIC SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Acute sinusitis in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2004 May. 29 p. [67 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Acute sinusitis

GUIDELINE CATEGORY

Diagnosis
Evaluation
Treatment

CLINICAL SPECIALTY

Allergy and Immunology
Family Practice
Internal Medicine
Nursing
Otolaryngology
Pharmacology

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Health Care Providers
Health Plans
Hospitals
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To increase the use of first line antibiotics when indicated for patients diagnosed with sinusitis
- To decrease the use of sinus x-rays in the diagnosis of acute sinusitis
- To educate providers about appropriate ear, nose, and throat referral for acute sinusitis
- To increase patient knowledge about the treatment of sinusitis

TARGET POPULATION

Patients age 18 and over presenting with symptoms of sinusitis who do not have a viral upper respiratory infection

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Phone triage for acute sinusitis
2. Triage for alternative diagnosis
3. Visit to provider
    - Review patient history
    - Regional exam of head and neck
    - Assessment of complicating factors
    - Transillumination
    - Plain sinus x-rays or coronal computed tomography scan
    - Maxillary antrum sinus aspiration for culture
4. Referral to ear, nose, and throat (ENT) provider

Treatment

1. Patient education on home self care measures
    - Maintenance of adequate hydration (6 to 10 glasses of liquid a day)
    - Steamy shower or increased home humidity
    - Application of warm facial packs
    - Analgesics, such as acetaminophen, ibuprofen, aspirin
    - Saline irrigation (homemade or commercial Ocean®, Salinex®, Nasal®)
    - Decongestants, such as pseudoephedrine hydrochloride (Sudafed®), oxymetazoline (Afrin®) or phenylephrine hydrochloride (Neo-Synephrine®) nasal sprays
    - Antihistamines are considered but not recommended

- Adequate rest
- Sleeping with head of bed elevated
- Avoiding cigarette smoke and extremely cool or dry air

2. Prevention measures
3. Intranasal corticosteroid spray
4. Antibiotics
    - Amoxicillin (Amoxil®, Wymox®)
    - Trimethoprim-sulfamethoxazole [TMP/SMX] (Bactrim®, Septra®**, Proloprim®, Trimpex®)
    - Amoxicillin/Clavulanate (Augmentin®)*
    - Second-generation cephalosporins
        - Cefuroxime (Ceftin®)*
        - Cefpodoxime (Vantin®)*
        - Cefprozil (Cefzil®)
        - Cefdinir (Omnicef®)
        - Cefaclor (Ceclor®)**
        - Loracarbef (Lorabid®)*
    - Macrolides
        - Clarithromycin (Biaxin®)*
        - Azithromycin (Zithromax®)*
    - Fluoroquinolones
        - Levofloxacin (Levaquin®)*
        - Gatifloxacin (Tequin®)***
        - Moxifloxacin (Avelox®)***

*These agents are U.S. Food and Drug Administration-approved for the treatment of acute sinusitis.

**These agents are not approved by the U.S. Food and Drug Administration for acute sinusitis treatment.

***There is concern within the medical community about using these drugs because of their potential for QT prolongation that some other quinolones do not have.

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

No additional description of literature search strategies is available.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Institute Partners: System-Wide Review

The guideline annotation, discussion and measurement specification documents undergo thorough review. Written comments are solicited from clinical, measurement, and management experts from within the member groups during an eight-week review period.

Each of the Institute's participating member groups determines its own process for distributing the guideline and obtaining feedback. Clinicians are asked to suggest modifications based on their understanding of the clinical literature coupled with their clinical expertise. Representatives from all departments

involved in implementation and measurement review the guideline to determine its operational impact. Measurement specifications for selected measures are developed by the Institute for Clinical Systems Improvement (ICSI) in collaboration with participating member groups following implementation of the guideline. The specifications suggest approaches to operationalizing the measure.

Guideline Work Group

Following the completion of the review period, the guideline work group meets 1 to 2 times to review the input received. The original guideline is revised as necessary and a written response is prepared to address each of the responses received from member groups. Two members of the Respiratory Steering Committee carefully review the input, the work group responses, and the revised draft of the guideline. They report to the entire committee their assessment of four questions: (1) Is there consensus among all ICSI member groups and hospitals on the content of the guideline document? (2) Has the drafting work group answered all criticisms reasonably from the member groups? (3) Within the knowledge of the appointed reviewer, is the evidence cited in the document current and not out-of-date? (4) Is the document sufficiently similar to the prior edition that a more thorough review (critical review) is not needed by the member group? The committee then either approves the guideline for release as submitted or negotiates changes with the work group representative present at the meeting.

Pilot Test

Member groups may introduce the guideline at pilot sites, providing training to the clinical staff and incorporating it into the organization's scheduling, computer and other practice systems. Evaluation and assessment occurs throughout the pilot test phase, which usually lasts for three-six months. At the end of the pilot test phase, ICSI staff and the leader of the work group conduct an interview with the member groups participating in the pilot test phase to review their experience and gather comments, suggestions, and implementation tools.

The guideline work group meets to review the pilot sites' experiences and makes the necessary revisions to the guideline; the Respiratory Steering Committee reviews the revised guideline and approves it for release.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The recommendations for the management of acute sinusitis in adults are presented in the form of an algorithm with 12 components, accompanied by detailed annotations. An algorithm is provided for Acute Sinusitis in Adults; clinical highlights and selected annotations (numbered to correspond with the algorithm) follow.

Class of evidence (A-D, M, R, X) ratings are defined at the end of the Major Recommendations field.

Clinical Highlights

1. Reduce unnecessary use of antibiotics - providers should be consistent with the recommended criteria for prescribing antibiotics in acute sinusitis endorsed by the Centers for Disease Control and Prevention, American Academy of Family Physicians, the American College of Physicians-American Society of Internal Medicine, and the Infectious Diseases Society of America (See the related National Guideline Clearinghouse [NGC] summary Principles of Appropriate Antibiotic Use for Acute Sinusitis in Adults.) (Annotation #9)
2. Triage all adult patients with symptoms of acute sinusitis through the related National Guideline Clearinghouse (NGC) summary of the Institute for Clinical Systems Improvement (ICSI) guideline Viral Upper Respiratory Infection (VURI) in Children and Adults. (Algorithm, Box 1)
3. Educate patients about comfort and prevention measures. (Annotation #9)
4. Use first line antibiotics - amoxicillin or trimethoprim-sulfamethoxazole (TMP/SMX). (Annotation #9)
5. Use an additional 10 to 14 days of amoxicillin or TMP/SMX to treat patients with a partial response. (Annotation #11)
6. Use an antibiotic that covers resistant bacteria (amoxicillin-clavulanate [Augmentin®] or another second line agent) to treat patients if failed on 10 to 14 days of amoxicillin. (Annotation #11)
7. Consider limited coronal computed tomography (CT) scan of sinuses and/or referral to ear, nose, and throat (ENT) provider for patients in whom 3 weeks of antibiotic therapy has not produced a response. (Annotation #11)

Acute Sinusitis in Adults Algorithm Annotations

All adult patients presenting with symptoms of sinusitis are first triaged through the related National Guideline Clearinghouse (NGC) summary of the Institute for Clinical Systems Improvement (ICSI) guideline Viral Upper Respiratory Infection (VURI) in Children and Adults.

2. Phone Triage Indicates Acute Sinusitis?
    A. Phone Triage Criteria

        Acute sinusitis may be present when:

        1. Upper respiratory symptoms have been present for at least 7 days, AND
        2. 2 or more of the following 4 factors are present at a point 7 days or more after the onset of the illness:
            a. Colored nasal drainage
            b. Poor response to decongestant
            c. Facial pain or sinus pain, particularly if aggravated by postural change or valsalva maneuver
            d. Headache

    For more information on triage, please refer to Annotation Appendix A, "Triage and Patient Education" in the original guideline document.

    B. Conditions Requiring Action Before 7 Days

        An individual reporting symptoms meeting the above phone triage criteria for acute sinusitis has a reasonably high likelihood of having

the disease. Such a patient's symptoms and chart should be presented to the physician or nurse practitioner for further action.

a. Fever >102 degrees F and a documented past history of sinusitis in addition to the above symptoms are supportive of a sinusitis diagnosis.
b. Tooth pain not of dental origin with any of the above findings is a more specific indication of sinusitis.
c. Severe symptoms should be considered for treatment before 7 days.
d. Known anatomical blockage (e.g., chronic nasal polyps, severely deviated septum, recurrent sinusitis) may need immediate treatment.

4. Needs Visit?
   A. A pattern of telephone requests for antibiotics by the same patient over time should be replaced by a provider visit.
   B. Patients on antibiotics for 2 or more days, whose sinus symptoms are worsening, should be scheduled for a provider visit.
   C. Patients with any one of the following complicating factors require emergent care:
      1. Orbital pain
      2. Visual disturbances
      3. Periorbital swelling or erythema
      4. Facial swelling or erythema
      5. Signs of meningitis or "worst headache of my life"

5. Phone Management/Home Self Care

   Patients who are in generally good health and only mildly ill may be appropriate candidates for phone management of presumed acute sinusitis. Both the patient and the provider should be comfortable with phone management. The following factors are also supportive of phone management:

   A. Established patient (has been seen by primary care physician within the past year)
   B. History of previous sinusitis treated successfully
   C. Earlier visit with viral upper respiratory infection that has progressed to probable acute sinusitis

   Patients who meet the criteria for phone management should receive the same treatment and instructions outlined in Annotation #9, "Home Self Care/Treatment," for visiting patients.

6. Visit
   A. Review history

      Confirm history as in phone triage.

   B. Regional exam of the head and neck

The following physical findings may be present:

1. Purulent nasal drainage
2. Sinus tenderness
3. Decreased transillumination (optional)

C. Assess for complicating factors--more intensive treatment may be indicated
    1. Local
        a. External facial swelling/erythema over involved sinus
        b. Involvement of frontal sinus or symptoms of sinus impaction
    2. Orbital
        a. Visual changes
        b. Extraocular motion abnormal
        c. Proptosis
        d. Periorbital inflammation/soft tissue edema
        e. Periorbital erythema/cellulitis
            - subperiosteal abscess
            - orbital cellulitis
            - orbital abscess
    3. Intracranial, Central Nervous System (CNS) Complications
        a. Cavernous sinus thrombosis
        b. Meningitis
        c. Subdural empyema
        d. Brain abscess

Plain sinus x-rays and other imagings are usually not necessary in making the diagnosis of acute sinusitis.

Maxillary antrum aspiration for culture is indicated only when precise microbial identification is required.

Evidence supporting the recommendation on sinus x-ray is of classes: C, R

9. Home Self Care/Treatment
    A. Provide Patient Education

The patient should be instructed to implement the following comfort and prevention measures:

1. Home Self Care Measures
    a. Maintain adequate hydration (drink 6 to 10 glasses of liquid a day to thin mucus)
    b. Steamy shower or increase humidity in your home
    c. Apply warm facial packs (warm wash cloth, hot water bottle, or gel pack for 5 to 10 minutes 3 or more times per day)
    d. Analgesics (acetaminophen, ibuprofen, aspirin as needed)

e. Saline irrigation
    - Homemade (1/4 teaspoon salt dissolved in 1 cup of water; use bulb syringe or dropper purchased from drug store)
    - Saline nasal drops/spray, commercial (e.g., Ocean®, Salinex®, Nasal®)
f. Decongestants (topically or orally)
    - Pseudoephedrine hydrochloride (e.g., Sudafed®) 60 mg. every 4 to 6 hours, not to exceed 4 doses per 24 hours.
    - Decongestant nasal sprays for no longer than 3 days, (e.g., oxymetazoline [e.g., Afrin®]), phenylephrine hydrochloride (Neo-Synephrine®)
g. Adequate rest
h. Sleep with head of bed elevated
i. Avoid cigarette smoke and extremely cool or dry air

2. Prevention Measures

Appropriate treatment of allergies and viral upper respiratory infections can prevent the development of sinusitis.

Environmental factors which affect the sinuses include cigarette smoke, pollution, swimming in contaminated water, and barotrauma.

For more information on patient and employer education, please refer to Annotation Appendix A of the original guideline document.

B. Treatment

1. Nasal steroid spray

Intranasal corticosteroid spray may be rational but is an unproved adjunctive therapy for acute sinusitis. The spray may be appropriate for selected cases of recurrent sinusitis especially in the presence of an allergy or inflammation etiology.

2. Antibiotics
    - Amoxicillin: 500 mg tab three times per day (TID) 10 days or 875 mg tab two times per day (BID) 10 days
    - For those allergic to amoxicillin: Trimethoprim-sulfamethoxazole (TMP/SMX): one double strength tab BID 10 days

Amoxicillin is a potential first line agent. Yet, in areas of S. Pneumoniae resistance >10%, providers should consider high dose amoxicillin or a second line agent.

Trimethoprim-sulfamethoxazole (TMP/SMX) is a potential first-line antibiotic. However, some providers may choose to avoid this medication because of concerns about resistant Streptococcus pneumoniae. As a result, TMP/SMX should primarily be considered for patients who are allergic to amoxicillin unless there are specific clinical circumstances in which its use is warranted.

For patients allergic to both amoxicillin and TMP/SMX, macrolides can be prescribed. A cephalosporin could be considered but there is approximately a 10% cross-reaction between cephalosporins and amoxicillin. (Refer to Annotation #11, "Further Treatment.")

It is important to instruct the patient to complete the course of antibiotics.

The duration of antibiotic therapy is controversial. Studies have shown effectiveness with 3 to 14 days. Most studies have used a 10 day course of antibiotics.

3. Call Back Instructions

   The patient should be instructed to call back if symptoms worsen, or if symptoms have not resolved within one week.

Evidence supporting the conclusion on antibiotics is of classes: A, C, M, R

10. Complete Response?
    A. Complete Response

       Patient is symptomatically improved to near normal.

    B. Partial Response

       Patient is symptomatically improved but not back to normal at the end of the first course of antibiotics.

    C. Failure or No Response

       Patient has little or no symptomatic improvement after finishing a 10 day course of first line antibiotic therapy (amoxicillin or TMP/SMX)

11. Further Treatment
    A. Partial Response
       1. An additional 10 to 14 days of amoxicillin 500 mg TID or 875 mg BID

          OR

2. TMP/SMX: one double strength tab BID x 10 to 14 days
3. Reinforce the comfort and prevention measures outlined in Annotation #9, "Home Self Care/Treatment."
4. Partial response is assessed at the end of 10 to 14 days by provider visit or phone call.

B. Failure or No Response to Initial Antibiotic

1. After 10 to 14 days of failure of first line antibiotic (amoxicillin or TMP/SMX), an antibiotic that covers resistant bacteria should be prescribed.
    a. Amoxicillin/clavulanate (Augmentin®): 875 mg BID x 14 days

    OR

    b. Another second line agent listed below

2. For patients allergic to both amoxicillin and TMP/SMX:
    a. Macrolides can be prescribed as outlined below.
    b. A cephalosporin may be considered; however, there is approximately a 10% cross-reaction between cephalosporins and amoxicillin.
    c. A fluoroquinolone with pneumococcal coverage may also be considered.

    Patients who have been treated with multiple courses of either amoxicillin or TMP/SMX over the past year, even if not within the past month, would likely be best treated with an agent that is more likely to cover resistant organisms including penicillin-resistant pneumococci.

    Penicillin resistance and TMP/SMX resistance are often linked. If one fails amoxicillin, it is highly likely that one will also fail TMP-SMX. Agents appropriate in these situations include those listed below.

3. Additional Second Line Agents
    a. Second generation cephalosporin
        - Cefuroxime (Ceftin®) 250 mg BID x 10 to 14 days
        - Cefpodoxime (Vantin®) 200 mg BID x 10 days
        - Cefprozil (Cefzil®*) 250-500 mg every 12 hours x 10 days*
        - Cefdinir (Omnicef®) 600 mg every day (or 300 mg BID) x 10 days
        - Cefaclor (Ceclor®) 500 mg TID x 10 to 14 days
        - Loracarbef (Lorabid®**) 400 mg one every 12 hours x 10 to 14 days**

    *Cefprozil may be given at a dose of 500 mg every 12 hours for moderate to severe infection.

    **Loracarbef is a carbacephem best classified as a cephalosporin.

b. Expanded spectrum macrolides
    - Clarithromycin (Biaxin®) 500 mg BID x 10 days
    - Azithromycin (Zithromax®) 500 mg every day x 3 days

c. Fluoroquinolones with pneumococcal coverage
    - Levofloxacin (Levaquin®) 500 mg every day x 10 to 14 days
    - Gatifloxacin*** (Tequin®) 400 mg every day x 10 days
    - Moxifloxacin*** (Avelox®) 400 mg every day x 10 days

***There is concern within the medical community about using these drugs because of their potential for QT prolongation that some other quinolones do not have.

d. U.S. Food and Drug Administration (FDA) Approval
    - Amoxicillin/clavulanate (Augmentin®), cefuroxime (Ceftin®), cefpodoxime (Vantin®), loracarbef (Lorabid®), clarithromycin (Biaxin®), azithromycin (Zithromax®), and levofloxacin (Levaquin®) are FDA-approved for the treatment of acute sinusitis.
    - Cefaclor (Ceclor®), and TMP/SMX (Septra®) are not approved by the Food and Drug Administration for acute sinusitis treatment.

4. Reinforce the comfort and prevention message outlined in Annotation #9, "Home Self/Treatment

C. Failure or No Response in 3 to 4 Weeks

In patients who have not responded to three weeks of continuous antibiotic therapy consider limited coronal computed tomography (CT) scan of sinuses and/or referral to ear, nose, and throat (ENT) provider.

Please see individual health plan for formulary information.

Definitions:

Classes of Research Reports

A. Primary Reports of New Data Collection:

Class A:

- Randomized, controlled trial

Class B:

- Cohort study

Class C:

- Non-randomized trial with concurrent or historical controls

- Case-control study
- Study of sensitivity and specificity of a diagnostic test
- Population-based descriptive study

Class D:

- Cross-sectional study
- Case series
- Case report

B. Reports that Synthesize or Reflect upon Collections of Primary Reports:

Class M:

- Meta-analysis
- Systematic review
- Decision analysis
- Cost-effectiveness analysis

Class R:

- Consensus statement
- Consensus report
- Narrative review

Class X:

- Medical opinion

CLINICAL ALGORITHM(S)

A detailed and annotated clinical algorithm is provided for the management of Acute Sinusitis in Adults.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The guideline contains an annotated bibliography and discussion of the evidence supporting each recommendation. The type of supporting evidence is identified for selected recommendations (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Symptom relief
- Accurate diagnosis of acute sinusitis in adults
- Appropriate use of non-pharmacologic measures
- Appropriate antibiotic use

POTENTIAL HARMS

There is concern within the medical community about using gatifloxacin (Tequin®) and moxifloxacin (Avelox®) because of their potential for QT prolongation that some other quinolones do not have.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- These clinical guidelines are designed to assist clinicians by providing an analytical framework for the evaluation and treatment of patients, and are not intended either to replace a clinician´s judgment or to establish a protocol for all patients with a particular condition. A guideline will rarely establish the only approach to a problem.
- This clinical guideline should not be construed as medical advice or medical opinion related to any specific facts or circumstances. Patients are urged to consult a health care professional regarding their own situation and any specific medical questions they may have.
- The seven day criteria for duration of symptoms are taken from a symposium consensus and are somewhat arbitrary. Patients who meet these criteria have a higher likelihood of having bacterial sinusitis as opposed to a viral upper respiratory infection. There is disagreement among the literature about the time period past which acute sinusitis is indicated.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Once a guideline is approved for release, a member group can choose to concentrate on the implementation of that guideline. When four or more groups choose the same guideline to implement and they wish to collaborate with others, they may form an action group.

In the action group, each medical group sets specific goals they plan to achieve in improving patient care based on the particular guideline(s). Each medical group shares its experiences and supporting measurement results within the action group. This sharing facilitates a collaborative learning environment. Action group learnings are also documented and shared with interested medical groups within the collaborative.

Currently, action groups may focus on one guideline or a set of guidelines such as hypertension, lipid treatment and tobacco cessation.

Detailed measurement strategies are presented in the original guideline document to help close the gap between clinical practice and the guideline recommendations. Summaries of the measures are provided in the National Quality Measures Clearinghouse (NQMC).

RELATED NQMC MEASURES

- Acute sinusitis in adults: percentage of patients with an office visit for sinusitis given a first-line antibiotic when an antibiotic is prescribed.
- Acute sinusitis in adults: percentage of patients with a sinus x-ray after an initial visit for acute sinusitis.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1995 Jul (revised 2004 May)

GUIDELINE DEVELOPER(S)

Institute for Clinical Systems Improvement - Private Nonprofit Organization

GUIDELINE DEVELOPER COMMENT

Organizations participating in the Institute for Clinical Systems Improvement (ICSI): Affiliated Community Medical Centers, Allina Medical Clinic, Altru Health System, Aspen Medical Group, Avera Health, CentraCare, Columbia Park Medical Group, Community-University Health Care Center, Dakota Clinic, ENT SpecialtyCare, Fairview Health Services, Family HealthServices Minnesota, Family Practice Medical Center, Gateway Family Health Clinic, Gillette Children's Specialty Healthcare, Grand Itasca Clinic and Hospital, Hamm Clinic, HealthEast Care System, HealthPartners Central Minnesota Clinics, HealthPartners Medical Group and Clinics, Hennepin Faculty Associates, Hutchinson Area Health Care, Hutchinson Medical Center, Lakeview Clinic, Mayo Clinic, Mercy Hospital and Health Care Center, MeritCare, Minnesota Gastroenterology, Montevideo Clinic,

North Clinic, North Memorial Health Care, North Suburban Family Physicians, NorthPoint Health &: Wellness Center, Northwest Family Physicians, Olmsted Medical Center, Park Nicollet Health Services, Quello Clinic, Ridgeview Medical Center, River Falls Medical Clinic, St. Mary's/Duluth Clinic Health System, St. Paul Heart Clinic, Sioux Valley Hospitals and Health System, Southside Community Health Services, Stillwater Medical Group, SuperiorHealth Medical Group, University of Minnesota Physicians, Winona Clinic, Winona Health

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GUIDELINE COMMITTEE

Respiratory Steering Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Work Group Members: Bruce Cunningham, DO (Work Group Leader) (Family HealthServices MN) (Family Practice); Pamela Harris, MD (Park Nicollet Health Services) (Allergy); Barbara Malone, MD (Otolaryngology & Head and Neck Surgery, P.A.) (Ear, Nose, and Throat); David Sherris, MD (Mayo Clinic) (Ear, Nose, and Throat); Brian Ebeling, MD (Quello Clinic, Ltd.) (Family Practice); Mark Hagberg, MD (Park Nicollet Health Services) (Family Practice); Robert Sheeler, MD (Mayo Clinic) (Family Practice); Tom Bisig, MD (Mayo Clinic) (Internal Medicine); Richard Pfohl, MD (Park Nicollet Health Services) (Internal Medicine); Paul Berry, MD (HealthPartners Medical Group) (Pediatrics); Susan Virant, RN (HealthPartners Medical Group) (Adult Nursing); Peter Marshall, PharmD (HealthPartners) (Pharmacy); Teresa Hunteman (Institute for Clinical Systems Improvement) (Measurement/Implementation Advisor); Jenelle Meyer, RN (Institute for Clinical Systems Improvement) (Facilitator)

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

In the interest of full disclosure, Institute for Clinical Systems Improvement (ICSI) has adopted the policy of revealing relationships work group members have with companies that sell products or services that are relevant to this guideline topic. The reader should not assume that these financial interests will have an adverse impact on the content of the guideline, but they are noted here to fully inform users. Readers of the guideline may assume that only work group members listed below have potential conflicts of interest to disclose.

No work group members have potential conflicts of interest to disclose.

ICSI's conflict of interest policy and procedures are available for review on ICSI's website at www.icsi.org.

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previously released version: Acute sinusitis in adults. Bloomington (MN): Institute For Clinical Systems Improvement (ICSI); 2002 Dec. 30 p.

GUIDELINE AVAILABILITY

Electronic copies: Available from the Institute for Clinical Systems Improvement (ICSI) Web site.

Print copies: Available from ICSI, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; telephone, (952) 814-7060; fax, (952) 858-9675; Web site: www.icsi.org; e-mail: icsi.info@icsi.org.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on July 10, 2000. The information was verified by the guideline developer on April 25, 2001. This summary was updated by ECRI on December 20, 2001 and April 18, 2003. The updated information was verified by the guideline developer on May 22, 2003. This summary was updated again by ECRI on September 17, 2004.

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